



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

N00236.002430
ALAMEDA POINT
SSIC NO. 5090.3

October 26, 2001

Glenna Clark
BRAC Operations, Code 06CA.GC/0718
Department of the Navy, Southwest Division
Naval Facilities Engineering Command
1230 Columbia Street, Suite 1100
San Diego, CA 92101

RE: Draft Field Sampling Plan/Quality Assurance Project Plan for Removal Action
Confirmation Sampling at IR Sites 5, 14 and 15, Alameda Point

Dear Ms. Clark:

EPA has reviewed the above referenced document, prepared by Tetra Tech EM Inc. and submitted by the Navy on August 24, 2001. In general, the FSP/QAPP appears satisfactory and EPA has a few minor comments that are provided in anticipation that the removal actions for these sites will be the final actions to address the soil contaminants. Due to the decision to terminate the proposed removal action for Site 15 during the BCT meeting on October 16, 2001, I have not included comments pertaining to confirmation sampling for Site 15 in this submittal.

Thank you for the opportunity to review the FSP/QAPP and we look forward to seeing the completed soil removal actions at Sites 5 and 14. Please call me at (415) 744-2367 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Anna-Marie Cook".

Anna-Marie Cook
Remedial Project Manager

enclosure

cc: Michael McClelland, SWDiv
Andrew Dick, SWDiv
Daniel Murphy, DTSC
Dennis Mishek, RWQCB
Elizabeth Johnson, City of Alameda
Michael John Torrey, Co-Chair Alameda RAB
Karla Brasaemle, TechLaw Inc

**EPA Review of the Draft Field Sampling Plan/Quality Assurance Project Plan
for Removal Action Confirmation Sampling at IR Sites 5 and 14
Alameda Point**

GENERAL COMMENTS

1. The text (page 23) states that if data from the confirmation samples do not meet the specified confidence and power goals that either additional samples will be collected and analyzed or power and confidence goals may be revised to less stringent levels. The number of samples was selected so that power and confidence goals would be met, so it is unclear why these goals can be revised after the sampling and analysis are done. Please explain why it is acceptable to revise power and confidence goals to less stringent levels.

SPECIFIC COMMENTS

1. **Table 1 and Section 1.3.1, Data Quality Objectives:** The text and table do not specify how the locations and number of additional sampling points will be determined if step-out excavation is necessary. Please include data quality objectives (DQOs) that specify the how the number and locations of additional sampling locations will be determined if step-out excavation is necessary.
2. **Section 1.3.1, Step 7 - Optimize the Design for Obtaining Data, Page 23, Figures 6, 8 and 9, and Table 1, Pages 1 and 2 of 5:** It is unclear how many confirmation samples are required for each site because the text, table, and figures indicate that a different number of samples will be collected (or are required). The numbers of samples that are specified in the text, in Table 1, and on the figures is summarized below:

Site	Number of Samples specified in Text, page 23	Number of Samples specified in Table 1	Number of Samples specified on site-specific figures
IR Site 5	20	2	20
IR Site 14	10	10	27

Please revise the text, Table 1 and figures to clearly specify the number of samples that

are required to meet data quality objectives and to specify the number of samples that will be collected.

3. **Section 2.1.2, Removal Action Areas, Page 47:** It is unclear if fire training was conducted before the berm was constructed. If fire training occurred before the berm was constructed, the original land surface may also be contaminated with dioxins. Please discuss whether fire-training was conducted before the berm was constructed and whether samples were collected from the original land surface beneath the berm and analyzed for dioxins.
4. **Section 2.2.1, Sampling Methods and Equipment, Page 49 and Table 2:** It appears that 1) the additional samples that will be required if the 0.5 foot thick layer of the berm at IR Site 14 must be excavated and 2) any additional sampling that may be necessary if step-out excavation is required are not included in this table. Please discuss how sample numbers will be assigned if additional sampling is necessary.
5. **Section 2.2.2, Decontamination:** Equipment rinsate samples are a check of the effectiveness of decontamination. Please state that equipment rinsate blanks will be collected and analyzed.
6. **Section 2.2.4, Sample Containers, Sample Preservation, and Holding Times, Page 53 and Table 3:** The text states that "soil samples will be scraped into...glass jars," but the table includes "core tubes" as an alternate sample container. If core tubes are used, samples will not be scraped out, but the tubes must be capped. For completeness, please discuss procedures to be utilized if core tubes are used (e.g., cover ends of tubes with teflon sheeting and end caps, etc).
7. **Section 2.3.1.1, Field Identification System, Pages 55 and 56:** The grid location and sample location system discussed in the text and depicted on figures 6 and 8 may not be sufficient if step-out excavation is required. Please discuss how additional samples will be numbered if step-out excavations are necessary.
8. **Section 2.2.3, Sample Shipment, Page 57:** According to Table 3, samples may be submitted in core tubes, but the sample packing procedures are only for sample bottles. Please discuss how core tubes will be prepared for shipment.
9. **Table 7 and Section 2.5.1, Field Duplicates, Page 70:** The text states that "soil field duplicate samples will not be collected for this sampling event because of the heterogeneous nature of the soil matrix." Thorough homogenization can eliminate much of the heterogeneity, but heterogeneity is a problem for clean soil. Duplicate samples are a measure of sampling technique, laboratory performance, and possible inhomogeneities in the sample and should be collected for all media. Please add field duplicate samples for soil sampling or justify why duplicate samples will not be collected.